

CLAIMS

What is claimed is:

1           1.     A data management system comprising:  
2           a data storage system configured to store data of a plurality of client  
3     protected computer systems, wherein the data storage system comprises a  
4     plurality of storage devices individually having a respective capacity, and a  
5     quantity of the data of the protected computer systems to be stored exceeds  
6     capacities of individual ones of the storage devices; and  
7           storage control circuitry coupled with the data storage system and  
8     configured to assign individual ones of the individual storage devices to store  
9     data for respective ones of the protected computer systems.

1           2.     The system of claim 1 wherein the storage control circuitry is  
2     configured to receive a request to add a new protected computer system and to  
3     assign one of the storage devices to implement data storage operations with  
4     respect to the new protected computer system.

1           3.     The system of claim 2 wherein the storage control circuitry is  
2     configured to monitor a status of at least one of the storage devices and to  
3     assign the one storage device for the new protected computer responsive to the  
4     monitoring.

1           4.     The system of claim 3 wherein the monitoring comprises  
2     monitoring a processing capacity of an archive agent of the at least one storage  
3     device.

1           5.     The system of claim 3 wherein the monitoring comprises  
2     monitoring a storage capacity of the at least one storage device.

1           6.     The system of claim 3 wherein the monitoring comprises  
2     monitoring a status of a plurality of the storage devices, and the assigning  
3     comprises assigning the storage device having a greatest available capacity.

1           7.     The system of claim 1 wherein entireties of the data for the  
2     protected computer systems are stored using respective assigned ones of the  
3     storage devices.

1           8.     The system of claim 7 wherein the entireties of the data comprise  
2     an entirety of baseline data and associated delta data for the respective  
3     protected computer systems.

1           9.     The system of claim 1 wherein the storage control circuitry is  
2     configured to assign a plurality of the storage devices to store an entirety of the  
3     data for one of the protected computer systems.

1           10.    The system of claim 1 wherein the storage control circuitry  
2     comprises a tracking database configured to store associations of the storage  
3     devices with respective ones of the protected computer systems.

1           11.    The system of claim 1 wherein the storage devices comprise disk  
2     storage devices.

1           12.    The system of claim 1 wherein at least one of the storage devices  
2     is configured to store data for a plurality of the protected computer systems.

1           13.    The system of claim 1 wherein the storage devices individually  
2     comprise an archive agent and a storage space.

1           14.    The system of claim 1 wherein the storage control circuitry  
2     comprises a master cell manager and at least one slave cell manager, and  
3     wherein the master cell manager is configured to assign one of the protected  
4     computer systems to one of the storage devices associated with the at least one  
5     slave cell manager.

1           15. The system of claim 1 wherein one of the storage devices is  
2 configured to transfer data for one of the protected computer systems to an  
3 other of the storage devices.

1           16. A data management system comprising:  
2 plural means for storing electronic data, wherein individual ones of the  
3 plural means for storing comprise a respective data storage capacity;  
4 means for communicating data intermediate the plural storage means and  
5 a plurality of client protected computer systems, wherein a quantity of data of  
6 the client protected computer systems exceeds individual data storage capacities  
7 of individual ones of the means for storing; and  
8 means for assigning individual ones of the means for storing to store data  
9 for respective ones of the client protected computer systems.

1           17. The system of claim 16 wherein the plural means for storing  
2 individually comprise means for storing an entirety of the data for a respective  
3 one of the client protected computer systems.

1           18. The system of claim 16 wherein plural ones of the means for  
2 storing comprise means for storing an entirety of the data for a respective one of  
3 the client protected computer systems.

1           19. The system of claim 16 further comprising tracking means for  
2 storing information regarding associations of individual ones of the plural means  
3 for storing with respective ones of the client protected computer systems.

1           20. The system of claim 16 wherein the plural means for storing  
2 individually comprise archive means and physical storage means.

1           21. An article of manufacture comprising:  
2 a processor-usable medium comprising processor-usable code configured  
3 to cause processing circuitry of storage control circuitry to:  
4 access information regarding a plurality of storage devices;

5           access information regarding a plurality of client protected  
6 computer systems;  
7           associate individual ones of the protected computer systems with  
8 respective ones of the storage devices;  
9           receive a request to add a new protected computer system;  
10          monitor capacities of the storage devices; and  
11          assign the new protected computer to one of the storage devices  
12 responsive to the monitoring.

1          22. The article of claim 21 wherein the processor-usable code is  
2 configured to cause the processing circuitry to associate responsive to user  
3 input.

1          23. The article of claim 21 wherein the processor-usable code is  
2 configured to cause the processing circuitry to associate responsive to the  
3 monitoring.

1          24. A data storage method comprising:  
2          providing a plurality of storage devices configured to store data for a  
3 plurality of client protected computer systems, wherein the storage devices  
4 individually comprise processing circuitry and a storage space;  
5          monitoring capacities of individual ones of the storage devices;  
6          associating one of the protected computer systems with one of the  
7 storage devices responsive to the monitoring; and  
8          implementing storage operations of the data for the associated one of the  
9 protected computer systems using the associated one of the storage devices in  
10 accordance with the associating.

1          25. The method of claim 24 wherein a quantity of data of the  
2 protected computer systems to be stored exceeds individual capacities of  
3 individual ones of the storage devices.

1           26. The method of claim 24 further comprising maintaining a record of  
2 the association of the one storage device and the one client protected computer  
3 system.

1           27. The method of claim 24 wherein the monitoring comprises  
2 monitoring storage capacities of the storage devices.

1           28. The method of claim 24 wherein the monitoring comprises  
2 monitoring processing capacities of the storage devices.

1           29. The method of claim 24 wherein the monitoring and assigning  
2 comprise monitoring and assigning using storage control circuitry.

1           30. The method of claim 29 further comprising providing the storage  
2 control circuitry comprising a distributed control system.

1           31. The method of claim 24 wherein the associating comprises  
2 associating the one protected computer system with the one storage device  
3 having a greatest available capacity.

1           32. The method of claim 24 further comprising transferring at least a  
2 portion of the data of the one protected computer system from the one storage  
3 device to an other storage device.

1           33. A data storage method comprising:  
2 a plurality of storage devices configured to store data for a plurality of  
3 client protected computer systems, the storage devices individually comprising  
4 processing circuitry;  
5 storing the data using the storage devices;  
6 monitoring capacities of the storage devices using storage control  
7 circuitry;  
8 providing a new storage device configured to store data for at least one  
9 of the protected computer systems; and

10 coupling processing circuitry of the new storage device with the storage  
11 control circuitry.

1 34. The method of claim 33 further comprising monitoring capacity of  
2 the new storage device using the storage control circuitry after the coupling.

1 35. The method of claim 33 wherein the monitoring comprises  
2 monitoring processing capacities of the storage devices.

1 36. The method of claim 33 wherein the monitoring comprises  
2 monitoring storage capacities of the storage devices.